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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

HAILU, TESHOME

ART UNIT

PAPER NUMBER

2434

MAIL DATE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/773,812	Applicant(s) FERLITSCH ET AL.	
	Examiner TESHOME HAILU	Art Unit 2434	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7,9-11,13-16,18-20,22-26 and 28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-7, 9-11, 13-16, 18-20, 22-26 and 28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in reply to an amendment filed on February 12, 2009. Claims 1, 3-7, 9-11, 13-16, 18-20, 22-26 and 28 have been amended.
2. Claims 2, 8, 12, 17, 21 and 27 have been canceled.
3. Claims 1, 3-7, 9-11, 13-16, 18-20, 22-26 and 28 are pending.

Response to Amendment

4. Applicant's arguments filed on February 12, 2009, with respect to 35 USC 103(a) rejections of claims 1, 3-7, 9-11, 13-16, 18-20, 22-26 and 28 have been fully considered but they are not persuasive.
5. Applicant argues that Wu (US Pub. No. 2002/0042884) fails to teach the amended claim limitation, "erasing residual data containing any content of the imaging job both on a client device and an imaging device, the content of the imaging job comprising instructions configured to produce visible information on the imaging output". Examiner respectfully disagrees.
6. Examiner would point out that, Wu teach this limitation as, (Page 8, paragraph 191, the sensitive part can be obtained from the hardware during printing and erased from memory immediately the printing process is completed) and (page 11, paragraph 277, the audit trail information is stored in the hardware and periodically uploaded to the server. The server maintains the audit trail for a predetermined period of time. After expiry of the predetermined period, it is deleted from the server). According to the specification of the invention, residual data defined as, (page 7, paragraph 90, **residual data 624 is any data produced by computer processes** during the processing of an imaging job which includes from imaging job creation to final output. For example, residual data 624 includes intermediate data containing content of the imaging job from memory, such as disk and RAM. When a print job is created, the job generation process 604 may produce intermediate data, such as in a file or RAM, containing some or all of the content of the job, which is later processed into a final imaging job). Examiner interpreted residual data as

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any sensitive data that erased or deleted by the printer (client side) or any audit trail information that is deleted by the server (sender side) of the system.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1, 11 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim limitation, "erasing residual data containing **any content of the imaging job** both on a client device and an imaging device, the **content of the imaging job** comprising instructions configured to produce visible information on the imaging output", is not clear to the examiner. Examiner understands from the specification that "content of the imaging job" is a visible information on the imaging output. However on the other hand, "any content of the imaging job" means any data produced by the computer processes as defined in paragraph 90 of the specification. Therefore, it is not clear the different between "***any content of the imaging job***" and "***content of the imaging job***". For examining purpose, examiner interpreted the claim language as ***any data produced by computer processes*** as mentioned in paragraph 90.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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10. Claims 1, 3-7, 9-11, 13-16, 18-20, 22-26 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu (US Pub. No. 2002/0042884) in view of Namba (US Pub. No. 2003/0140009) and further in view of Lordemann (US Pub. No. 2002/0046350).

As per claim 1 Wu discloses:

A method for securing an imaging job, the method comprising: performing an access control function relating to a document; (page 4, paragraph 89, the communication server system consists of at least one server that provides the necessary facilities for secure and reliable document delivery. It acts as a trusted third party in authenticating the sender, and the recipient, the transaction is based on the internal public key infrastructure protocol). According to the invention (paragraph 17), determination of user authorization (authentication) is performed by the access control function.

Generating an imaging job from the document; (abstract, line 1-3, a method for printing a document using network system).

Decrypting the encrypted content by a recipient; (page 6, paragraph 154, the recipient decrypts the key and hash using the password obtained separately to decrypt the data using the key).

Encoding into imaging output non-destructible information; (page 2, paragraph 42, adding an optical watermark during printing).

Erasing residual data containing any content of the imaging job both on a client device and an imaging device, the content of the imaging job comprising instructions configured to produce visible information on the imaging output. (Page 8, paragraph 191, the sensitive part can be obtained from the hardware during printing and erased from memory immediately the printing process is completed) and (page 11, paragraph 277, the audit trail information is stored in the hardware and periodically uploaded to the server. The server maintains the audit trail for a predetermined period of time. After expiry of the predetermined period, it is deleted from the server).

Encrypting content of the imaging job and not encrypting non-content such that a downstream non-content dependent process will still properly process the imaging job; (page 2, paragraph 46, an encrypted form of the sensitive part is preferably sent to the recipient when the recipient is registered with

the server, the server managing the decryption key; the sensitive part being decrypted when and as required).

Wu does not explicitly disclose about the method of not encrypting non-content information. However, on the same field of endeavor, Namba teaches this limitation as, (page 10, paragraph 139, The message 70 (usage environment information notice) includes a header (non-content) which is not subject to encryption, a payload (content) which is subject to encryption and a trailer).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention was made, to modify the teaching of Wu and include the method of not encrypting non-content information using the teaching of Namba in order to separate the copyright related information (encrypted or payload) from the attached (header or basic) information and reduce the encryption process.

Performing an auditing function relating to the document (page 5, paragraph 126, an audit trail to record the entire process), including extracting reduced content information from the document and storing the reduced content information in secured storage as at least part of an audit trail generated by the auditing function; (page 8, paragraph 189, the sensitive part is compressed and kept to reduce the download time).

Wu and Namba does not explicitly disclose about the method of comprising a reduced content in audit trail. However, on the same field of endeavor, Lordemann teaches this limitation as, (page 2, paragraph 13, it would be desirable to store information such as the request, authentication, authorization, serialization of the requested object, nonce of the requested object, security policy of the requested object, and a description of the protected object in the audit trail to provide comprehensive protection and demonstrate the integrity and irrefutability of the audit trail).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention was made, to modify the teaching of Wu and Namba to include the method comprising a reduced content in audit trail using the teaching of Lordemann in order to protect objects such as code, documents and images that are distributed over a network. (See page 1, paragraph 2 of Lordemann).

Claims 11 and 20 are rejected under the same reason set forth in rejection of claim 1:

As per claim 3 Wu in view of Namba and further in view of Lordemann discloses:

The method of claim 1, further comprising transmitting the imaging job from a client to the recipient, and wherein the transmitting is performed in between the encrypting and the decrypting. (Page 2, paragraph 46, an encrypted form of sensitive part is sent to recipient for printing and delete upon completion of the printing job to protect the data from attacker).

Claims 13 and 22 are rejected under the same reason set forth in rejection of claim 3:

As per claim 4 Wu in view of Namba and further in view of Lordemann discloses:

The method of claim 1, wherein the actions are performed in the order as listed. (Page 7, paragraph 168, the printing job is placed in the queue of the spool).

Claim 23 is rejected under the same reason set forth in rejection of claim 4:

As per claim 5 Wu in view of Namba and further in view of Lordemann discloses:

The method of claim 1, wherein the access control function determines if a user has authorization to perform a certain operation by using access control information. (Page 4, paragraph 89, the communication server system consists of at least one server that provides the necessary facilities for secure and reliable document delivery. It acts as a trusted third party in authenticating the sender, and the recipient, the transaction is based on the internal public key infrastructure protocol).

Claims 14 and 24 are rejected under the same reason set forth in rejection of claim 5:

As per claim 6 Wu in view of Namba and further in view of Lordemann discloses:

The method of claim 5, wherein the access control information comprises data that is selected from the group consisting of a login identification, a department code, client device identification, recipient

device identification, imaging operation, meta-data, a serial number, a network address, a digital signature and biometric data. (Page 2, paragraph 26-34, the secure document delivery and printing control may be based on a trusted document structure like digital signature, optical watermark usage control and audit trail). Further Wu disclosed, (page 2, paragraph 44, the server may communicate with the printer to verify the printer serial number and internet protocol address).

Claims 15 and 25 are rejected under the same reason set forth in rejection of claim 6:

As per claim 7 Wu in view of Namba and further in view of Lordemann discloses:

The method of claim 1, wherein the access control function determines authorized content and causes the authorized content to be processed to create the imaging job. (Abstract, line 3-10, authenticate a document prior to being forwarded to the recipient for printing).

Claims 16 and 26 are rejected under the same reason set forth in rejection of claim 7:

As per claim 9 Wu in view of Namba and further in view of Lordemann discloses:

The method of claim 1, wherein the non-destructible information encoded into the imaging output comprises tracking information. (Page 11, paragraph 276, information about printed document is kept in audit trail inside the server for predetermined time).

Claims 18 and 28 are rejected under the same reason set forth in rejection of claim 9:

As per claim 10 Wu in view of Namba and further in view of Lordemann discloses:

The method of claim 9, wherein the tracking information comprises client tracking information and imaging device tracking information. (Page 11, paragraph 276, audit trail information is generated and signed by the program inside the hardware device with receiver's ID key after each copy printed, which

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provides non-repudiation for each printed copy). Where non-repudiation means a way of verifying content transferred from sender to recipient.

Claim 19 is rejected under the same reason set forth in rejection of claim 10:

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TESHOME HAILU whose telephone number is (571)270-3159. The examiner can normally be reached on Mon-Fri 7:30a.m. to 5:00p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on (571) 272-3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Teshome Hailu/

Examiner, Art Unit 2434

/Kambiz Zand/

Supervisory Patent Examiner, Art Unit 2434